IN THE CLAIMS:

The pending claims are set forth below and have been amended and/or cancelled, without prejudice, where noted:

1-33. (Cancelled)

34. (New) A method for the recovery of a slurry of polymer particles from a polymerization reactor comprising:

providing a slurry comprising polymer particles suspended in a liquid diluent;

introducing the slurry into a flash vessel;

reducing a pressure of the slurry from a first pressure to a second pressure within the flash vessel to vaporize the liquid diluent and form diluent vapor;

removing at least a portion of the diluent vapor from the flash vessel to form a concentrated slurry;

passing the concentrated slurry from the flash vessel to a transfer vessel;

measuring a level of polymer particles within the flash vessel;

continuously withdrawing an amount of polymer particles from the transfer vessel and passing the amount of polymer particles from the transfer vessel to a purge vessel, the amount adapted to maintain the level of polymer particles within the flash vessel at a predetermined level;

separating remaining diluent from the polymer particles within the purge vessel; and

recovering the polymer particles from the purge vessel.

35. (New) The method of claim 34 further comprising passing a nitrogen containing gas through the purge vessel to remove accumulated liquid from the polymer slurry in the purge vessel.

36. (New) The method of claim 34, wherein the predetermined level of polymer particles seals the flash vessel from the purge vessel.

37. (New) The method of claim 34, wherein the polymer particles comprise an olefin polymer.

38. (New) A system for the recovery of a polymer from a polymerization reactor comprising:

a polymerization reactor adapted to contact an olefin monomer with a catalyst system to form an olefin polymer within a polymer slurry;

a flash vessel operably connected to the polymerization reactor and adapted to receive the polymer slurry and vaporize at least a portion of diluent from the polymer slurry;

a purge vessel adapted to separate remaining diluent from the polymer slurry;

a transfer vessel disposed between the flash vessel and the purge vessel;

a first valve disposed between the flash vessel and the transfer vessel; and

a second valve disposed between the transfer vessel and the purge vessel, the first and second valves adapted to maintain a predetermined level of polymer slurry within the purge vessel.

39. (New) The system of claim 38 further comprising a control system operably connected to the first valve and the second valve and adapted to communicate with the same.

40. (New) The system of claim 39, wherein the control system is adapted to measure a level of polymer slurry within the transfer vessel.